RECEIVED

FEB 1 9 2003



TECH CENTER 1600/2900

1600

#3°C

RAW SEQUENCE LISTING

PATENT APPLICATION: US/08/981,824A

DATE: 02/12/2003 TIME: 10:45:02

Input Set : A:\2923-393.txt

Output Set: N:\CRF4\02112003\H981824A.raw

```
3 <110> APPLICANT: Endl, Josef
        Stahl, Peter
         Schendel, Dolores
 5
        Boitard, Christian
 6
 7
        Van Endert, Peter
         Jung, Gunther-Gerhard
10 <120> TITLE OF INVENTION: AUTOREACTIVE PEPTIDES FROM HUMAN GLUTAMIC ACID-DECARBOXYLASE
        (GAD)
13 <130> FILE REFERENCE: 2923-393
15 <140> CURRENT APPLICATION NUMBER: US 08/981824A
16 <141> CURRENT FILING DATE: 1998-09-18
18 <150> PRIOR APPLICATION NUMBER: PCT/EP/96/03093
19 <151> PRIOR FILING DATE: 1996-07-15
21 <150> PRIOR APPLICATION NUMBER: DE/195 25 784.7
22 <151> PRIOR FILING DATE: 1995-07-14
24 <160> NUMBER OF SEQ ID NOS: 43
26 <170> SOFTWARE: PatentIn version 3.2
                                                                ENTERED
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 20
30 <212> TYPE: PRT
31 <213> ORGANISM: Homo sapiens
33 <400> SEQUENCE: 1
35 Asp Val Asn Tyr Ala Phe Leu His Ala Thr Asp Leu Leu Pro Ala Cys
                                       10
39 Asp Gly Glu Arg
43 <210> SEQ ID NO: 2
44 <211> LENGTH: 20
45 <212> TYPE: PRT
46 <213> ORGANISM: Homo sapiens
48 <400> SEQUENCE: 2
50 Ser Asn Met Tyr Ala Met Met Ile Ala Arg Phe Lys Met Phe Pro Glu
51 1
54 Val Lys Glu Lys
58 <210> SEQ ID NO: 3
59 <211> LENGTH: 20
60 <212> TYPE: PRT
61 <213> ORGANISM: Homo sapiens
63 <400> SEQUENCE: 3
65 Asn Trp Glu Leu Ala Asp Gln Pro Gln Asn Leu Glu Glu Ile Leu Met
```

69 His Cys Gln Thr

Input Set : A:\2923-393.txt

```
70
73 <210> SEQ ID NO: 4
74 <211> LENGTH: 20
75 <212> TYPE: PRT
76 <213> ORGANISM: Homo sapiens
78 <400> SEQUENCE: 4
80 Thr Leu Lys Tyr Ala Ile Lys Thr Gly His Pro Arg Tyr Phe Asn Gln
81 1
                                       10
84 Leu Ser Thr Gly
85
88 <210> SEQ ID NO: 5
89 <211> LENGTH: 20
90 <212> TYPE: PRT
91 <213> ORGANISM: Homo sapiens
93 <400> SEQUENCE: 5
95 Pro Arg Tyr Phe Asn Gln Leu Ser Thr Gly Leu Asp Met Val Gly Leu
                                       10
99 Ala Ala Asp Trp
100
                20
103 <210> SEQ ID NO: 6
104 <211> LENGTH: 20
105 <212> TYPE: PRT
106 <213> ORGANISM: Homo sapiens
108 <400> SEQUENCE: 6
110 Thr Tyr Glu Ile Ala Pro Val Phe Val Leu Leu Glu Tyr Val Thr Leu
111 1
114 Lys Lys Met Arg
115
118 <210> SEQ ID NO: 7
119 <211> LENGTH: 20
120 <212> TYPE: PRT
121 <213> ORGANISM: Homo sapiens
123 <400> SEQUENCE: 7
125 Phe Phe Arg Met Val Ile Ser Asn Pro Ala Ala Thr His Gln Asp Ile
126 1
129 Asp Phe Leu Ile
130
                20
133 <210> SEQ ID NO: 8
134 <211> LENGTH: 14
135 <212> TYPE: PRT
136 <213> ORGANISM: Homo sapiens
138 <400> SEQUENCE: 8
140 Ile Leu Ile Lys Cys Asp Glu Arg Gly Lys Met Ile Pro Ser
141 1
144 <210> SEQ ID NO: 9
145 <211> LENGTH: 14
146 <212> TYPE: PRT
147 <213> ORGANISM: Homo sapiens
149 <400> SEQUENCE: 9
```

Input Set : A:\2923-393.txt

```
151 Leu Gly Ile Gly Thr Asp Ser Val Ile Leu Ile Lys Cys Asp
155 <210> SEQ ID NO: 10
156 <211> LENGTH: 14
157 <212> TYPE: PRT
158 <213> ORGANISM: Homo sapiens
160 <400> SEQUENCE: 10
162 Leu Ala Phe Leu Gln Asp Val Met Asn Ile Leu Leu Gln Tyr
163 1
                   5
166 <210> SEQ ID NO: 11
167 <211> LENGTH: 14
168 <212> TYPE: PRT
169 <213> ORGANISM: Homo sapiens
171 <400> SEQUENCE: 11
173 Tyr Asp Leu Ser Tyr Asp Thr Gly Asp Lys Ala Leu Gln Cys
174 1
          5
                             10
177 <210> SEQ ID NO: 12
178 <211> LENGTH: 14
179 <212> TYPE: PRT
180 <213> ORGANISM: Homo sapiens
182 <400> SEQUENCE: 12
184 Val Ser Tyr Gln Pro Leu Gly Asp Lys Val Asn Phe Phe Arg
185 1
188 <210> SEQ ID NO: 13
189 <211> LENGTH: 14
190 <212> TYPE: PRT
191 <213> ORGANISM: Homo sapiens
193 <400> SEQUENCE: 13
195 Leu Ala Ala Asp Trp Leu Thr Ser Thr Ala Asn Thr Asn Met
199 <210> SEQ ID NO: 14
200 <211> LENGTH: 14
201 <212> TYPE: PRT
202 <213> ORGANISM: Homo sapiens
204 <400> SEQUENCE: 14
206 Leu Leu Tyr Gly Asp Ala Glu Lys Pro Ala Glu Ser Gly Gly
210 <210> SEQ ID NO: 15
211 <211> LENGTH: 14
212 <212> TYPE: PRT
213 <213> ORGANISM: Homo sapiens
215 <400> SEQUENCE: 15
217 Val Asn Tyr Ala Phe Leu His Ala Thr Asp Leu Leu Pro Ala
218 1
221 <210> SEQ ID NO: 16
222 <211> LENGTH: 14
223 <212> TYPE: PRT
224 <213> ORGANISM: Homo sapiens
226 <400> SEQUENCE: 16
```

Input Set : A:\2923-393.txt

```
228 Leu Leu Gln Tyr Val Val Lys Ser Phe Asp Arg Ser Thr Lys
232 <210> SEQ ID NO: 17
233 <211> LENGTH: 14
234 <212> TYPE: PRT
235 <213> ORGANISM: Homo sapiens
237 <400> SEQUENCE: 17
239 Phe Thr Tyr Glu Ile Ala Pro Val Phe Val Leu Leu Glu Tyr
240 1
                   5
                         10
243 <210> SEQ ID NO: 18
244 <211> LENGTH: 14
245 <212> TYPE: PRT
246 <213> ORGANISM: Homo sapiens
248 <400> SEQUENCE: 18
250 Leu Glu Tyr Val Thr Leu Lys Lys Met Arg Glu Ile Ile Gly
251 1
        - 5
254 <210> SEQ ID NO: 19
255 <211> LENGTH: 14
256 <212> TYPE: PRT
257 <213> ORGANISM: Homo sapiens
259 <400> SEQUENCE: 19
261 Asn Met Tyr Ala Met Met Ile Ala Arg Phe Lys Met Phe Pro
262 1
265 <210> SEQ ID NO: 20
266 <211> LENGTH: 14
267 <212> TYPE: PRT
268 <213> ORGANISM: Homo sapiens
270 <400> SEQUENCE: 20
272 Lys Ile Trp Met His Val Asp Ala Ala Trp Gly Gly Leu
273 1
276 <210> SEQ ID NO: 21
277 <211> LENGTH: 14
278 <212> TYPE: PRT
279 <213> ORGANISM: Homo sapiens
281 <400> SEQUENCE: 21
283 Trp Gly Gly Leu Leu Met Ser Arg Lys His Lys Trp Lys
284 1
287 <210> SEQ ID NO: 22
288 <211> LENGTH: 14
289 <212> TYPE: PRT
290 <213> ORGANISM: Homo sapiens
292 <400> SEQUENCE: 22
294 Glu Gly Tyr Glu Met Val Phe Asp Gly Lys Pro Gln His Thr
295 1
                    5
298 <210> SEQ ID NO: 23
299 <211> LENGTH: 14
300 <212> TYPE: PRT
301 <213> ORGANISM: Homo sapiens
303 <400> SEQUENCE: 23
```

Input Set : A:\2923-393.txt

```
305 Arg Tyr Phe Asn Gln Leu Ser Thr Gly Leu Asp Met Val Gly
309 <210> SEQ ID NO: 24
310 <211> LENGTH: 14
311 <212> TYPE: PRT
312 <213> ORGANISM: Homo sapiens
314 <400> SEQUENCE: 24
316 Trp Leu Thr Ser Thr Ala Asn Thr Asn Met Phe Thr Tyr Glu
317 1
                  5
320 <210> SEQ ID NO: 25
321 <211> LENGTH: 14
322 <212> TYPE: PRT
323 <213> ORGANISM: Homo sapiens
325 <400> SEQUENCE: 25
327 Thr Ala Asn Thr Asn Met Phe Thr Tyr Glu Ile Ala Pro Val
328 1
           5
331 <210> SEQ ID NO: 26
332 <211> LENGTH: 14
333 <212> TYPE: PRT
334 <213> ORGANISM: Homo sapiens
336 <400> SEQUENCE: 26
338 Leu Val Ser Ala Thr Ala Gly Thr Thr Val Tyr Gly Ala Phe
339 1
342 <210> SEQ ID NO: 27
343 <211> LENGTH: 14
344 <212> TYPE: PRT
345 <213> ORGANISM: Homo sapiens
347 <400> SEQUENCE: 27
349 Tyr Ile Pro Pro Ser Leu Arg Thr Leu Glu Asp Asn Glu Glu
353 <210> SEQ ID NO: 28
354 <211> LENGTH: 14
355 <212> TYPE: PRT
356 <213> ORGANISM: Homo sapiens
358 <400> SEQUENCE: 28
360 Val Ile Ser Asn Pro Ala Ala Thr His Gln Asp Ile Asp Phe
364 <210> SEQ ID NO: 29
365 <211> LENGTH: 25
366 <212> TYPE: PRT
367 <213> ORGANISM: Homo sapiens
369 <400> SEQUENCE: 29
371 Gly Met Ala Ala Leu Pro Arg Leu. Ile Ala Phe Thr Ser Glu His Ser
372 1
375 His Phe Ser Leu Lys Lys Gly Ala Ala
376
                20
379 <210> SEQ ID NO: 30
380 <211> LENGTH: 20
381 <212> TYPE: PRT
```

Input Set : A:\2923-393.txt

Output Set: N:\CRF4\02112003\H981824A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:31; Xaa Pos. 1,8 Seq#:32; Xaa Pos. 1,8 Seq#:40; N Pos. 4 Seq#:40; Xaa Pos. 2

Seq#:41; Xaa Pos. 2